

CLAIMS

1. A method for identifying a perturbagen that inhibits viral growth, comprising the steps of:
 - 5 (a) introducing a perturbagen encoding nucleic acid into a cell;
 - (b) exposing said perturbagen-bearing cell to a virus; and
 - (c) selecting for growth-proficient cells.
- 10 2. The method of claim 1, wherein said step of selecting for growth-proficient cells comprises detecting cells that are not productively infected with said virus.
3. The method of claim 2, wherein said step of detection comprises detection of non-fluorescent cells.
- 15 4. The method of claim 1, wherein said step of selecting for growth-proficient cells comprises a stringent selection for growth.
5. The method of claim 1, wherein said perturbagen is in a scaffold.
- 20 6. The method of claim 5, wherein said scaffold is non-fluorescing GFP.
7. The method of claim 1 wherein said virus is selected from the group consisting of rhinovirus, reovirus, influenza virus, adenovirus, human immunodeficiency virus, human papilloma virus, hepatitis virus and herpes virus.
- 25 8. The method of claim 7 wherein said virus is human immunodeficiency virus.
9. A method for identifying a cell proliferation gene involved in viral growth, comprising the steps of:
 - 30 (a) identifying within a plurality of virally infected cells a cell that continues to

proliferate; and

- (b) identifying within said cell that continues to proliferate a corresponding cell proliferation gene.

5 10. The method of claim 9, wherein said cell that continues to proliferate was transduced with a perturbagen prior to viral infection.

11. A method for identifying a cellular target involved in viral growth within a cell, comprising the steps of:

- 10 (l) identifying within a plurality of virally infected cells a cell that continues to proliferate; and
(m) identifying within said cell that continues to proliferate a corresponding cellular target.

15 12. The method of claim 11, wherein said cell that continues to proliferate was transduced with a perturbagen prior to being virally infected.

13. The method of claim 12, wherein said step of identifying comprises a protein/protein interaction assay.

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